

Making Computers Simple

The Waite Group

CP/M* BIBLE

CP/M USER'S REFERENCE CARD

Versions 1.3 to 2.2

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FILE REFERENCING

The use of **filenames** means "file specification", and describes the variations in which file names, file types, and disk drive names can be included in a CP/M command string. Specific file names and file types (parentheses) or wildcards (dot) be specified.

Format: x.filenames.ext

x: = Disk drive name (A-E); CP/M 1.2;
A-E; CP/M 1.4; A-P; CP/M 2.0/2.2

filenames: = Name of file (1 to 8 characters)

ext: = Extension or file type (optional) or 1 to 3 characters.

BUILT-IN COMMANDS

x: Make drive x, the logged drive.

DIR List all files on logged disk.

DIR x: List all files on drive x.

DIR filenames List all files specified by filenames.

FILE commands ext=extname and filename file extname to filename.ext.

REN x extname ext=extname ext extname ext is on drive x.

REN filenames Rename filenames specified within filenames.

TYPE filenames Display on console contents of filenames.

USER a Select disk "user" and a (x = 0-11).

(CP/M 2.0/2.2 only.)

SAVE a filenames Save to memory pages starting from location.

0000 into filenames. 3 "Memory Page" = 256 bytes.

CONTROL CHARACTER COMMANDS: Control character commands are entered by simultaneously pressing the CTRL key and the indicated key on the console device.

CTRL/C Clear Read

CTRL/E List long command string overflow on read line.

CTRL/H Backspace

CTRL/I Tap cursor right 8 spaces.

CTRL/J Line Feed

CTRL/M Carriage Return

CTRL/N Cancel current command string.

CTRL/R Same as CTRL/I (CP/M 1.4), and erase line

(CP/M 2.0/2.2).

CTRL/S Register called command string on read line, and send all actual characters deleted with DELETE or RUBOUT key.

CTRL/T Stop/Restart scrolling of text on console device.

CTRL/P Stop all console device input and output on the LPT printer device.

CTRL/Q End console input (BI and PP) commands.

DELETE or **RUBOUT** Delete character to left, and erase deleted character.

STAT COMMAND

STAT Show amount of free space on default drive. (Free space of every drive to which a read operation was made will also be shown.)

STAT x: Show amount of free space on drive x.

STAT filenames Show size in records, kilobytes, and sectors of filenames. In CP/M 2.0/2.2, 8.0/8.0 and OS-2/MS-DOS 2.0/2.2 is also shown.

STAT filenames \$A/\$B Set files to Read-Only.

STAT filenames \$A/\$B Set files to Read-Write.

STAT x = \$B/\$C Temporarily set disk x to Read-Only.

STAT filenames \$B/\$C Set files to System files. (CP/M 2.0/2.2)

STAT filenames \$B/\$C Set files to Directory files. (CP/M 2.0/2.2)

STAT \$B/\$C Show current \$B/\$C number and numbers containing files (CP/M 2.0/2.2).

STAT \$B/\$C Show characteristics of disk in default drive.

STAT \$B/\$C Show characteristics of disk in drive x.

STAT \$B/\$C Show current physical-to-logical device assignments.

STAT \$B/\$C Show information on allowed device assignments and other STAT commands.

STAT log = phy Assign physical device phy to logical device log, where device assignments can be

Logical	Physical
CON	= TTY, COM, LPT, or SCL
WPR	= TTY, PRN, GPT, or GPD
PLS	= TTY, JFP, GPT, or GPD
LPT	= TTY, CRT, LPT, or SCL

PIP COMMAND

PIP Load PIP to perform individual copy operations. Press the [R] button key to exit when finished.

PIP x=xfilenames Copy file(s) from disk drive x to disk drive x.

PIP y new ext=old ext Copy file old ext on disk x into file new ext on disk y.

PIP y new ext=old1 ext and2 ext,... Copy all files on disk x in the order shown, into file new ext on disk y.

PIP \$B/\$C = filenames Copy filenames to device \$B/\$C, which can be any predefined standard logical or physical device (except BAT's). Special PIP logical devices (BAT) (for output-only devices) and PRN (for printer device) can also be used.

PIP filenames=\$B/\$C Copy input from device \$B/\$C into filenames and CTRL/T is entered. Standard console and input-only devices may be used, as well as special PIP BAT devices (input-only devices).

PIP PRN = NULL: Send a null header and/or

PIP PRN = NULL: filenames a trailer while copying

PIP PRN = NULL: filenames: NULL: filenames is the subject

PIP PRN = filenames: NULL: only device.

PIP PRN = filenames: NULL: Send an end-of-file marker while copying filenames to the output-only device.

OPTIONAL PIP PARAMETERS

[P] Verify accuracy of copied data.

[E] Erase filenames ext on console while being copied.
[Backsp<N>] Backs copying after text in string is found (terminate string with CTRL/T).

[Backsp<N> 2] Stop copying after text in string is found (terminate string with CTRL/T).

[A] Convert characters to lower case during copying.

[B] Convert characters to upper case during copying.

[M] Delete all characters on each line of text after column n during copying.

[Pa] Convert all ASCII tab characters to y number of spaces during copying.

[P] Delete all form-feed characters during copying.

[Pa] Insert form-feed characters after each y number of lines during copying.

- [A] Add sequential line numbers without leading zeros to text during copying.
- [N2] Same as [N] but with leading zeros.
- [R] Copy a System file (CP/M 2.0/2.2).
- [W] Copy with the destination file if it is read-only (CP/M 2.0/2.2).
- [W] Copy from USB number *y* (3 to 15) to the current USB number (CP/M 2.0/2.2).
- [X] Interpret file(s) being copied as containing non-ASCII output machine code.
- [Y] Specify "Copy Mode" format during copying between input-only and output-only devices.
- [Z] Ignore any Null Records in final hexadecimal format during copying.
- [Z] Set parity bit of all bytes being copied to zero.

ED COMMAND

- ED Manip: Load ED into memory and open filename for creation and/or editing.
- ED Subcommands: The appearance of "**^Z**" in a command string means the CTRL/Z command is used. "**CP**" means ED's Character Pointer.
- aa Append *y* text lines from source file to buffer.
- BA Append all text lines in until buffer is full.
- BA Append all text lines in until buffer is full.
- I Enter insert mode until CTRL/I is entered.
- Insert Enter insert mode until CTRL/Z is entered, and insert (ign).
- Insert^E Enter insert mode, insert (ign), and exit.
- E Engage character translation to upper case.
- E Disengage character translation to upper case.
- m Move CP *y* characters to right.
- m Move CP *y* characters to left.
- ss Move CP *y* lines forward.
- ss Move CP *y* lines back.
- F Engage displaying of line numbers.
- F Disengage displaying of line numbers.
- m Move CP to line number *y*.
- B Move the CP to beginning of buffer.
- B Move the CP to end of buffer.
- T Display text on current line before CP.
- BT Display text on current line after CP.
- BT Display all text on current line.
- BT Display *y* lines after CP.
- BT Display *y* lines before CP.
- BT Display all lines after the CP.
- BT Display all lines before the CP.
- pp Move CP *y* pages forward.
- pp Move CP *y* pages back.
- ss Delete *y* characters after CP.
- ss Delete *y* characters before CP.
- ss Delete *y* lines after CP.
- ss Delete *y* lines before CP.
- Insert^Z First text string in (ign) in the buffer.
- insert^Z As above except first *y*th occurrence of (ign).
- Insert^Z Same as the F command, except pattern insert^Z automatically appends operators from source file as necessary.
- Insert^Z Replace^Z Search for text in (ign) and replace it with replace text string.
- insert^Z Replace^Z Same as B command except first *y*th occurrence of (ign) text string.

- Insert^Z Insert^Z First (ign) string, insert insert string after first (quasiquote), and delete all text thereafter until end string is found.
- insert^Z Insert^Z As above except first *y*th occurrence of (ign).
- insert^Z Specify "insert" repetition of group of commands (eginsert). *y* number of times.
- ss Display total buffer usage and free space.
- ss Write current line to the temporary output file.
- ss Write *y* lines to temporary output file.
- ss Write lines until buffer is full empty.
- ss Write all lines until buffer is completely empty.
- ss Write *y* lines to a temporary library file.
- ss Read entire contents of temporary library file (created by "ss") into buffer.
- ss Read library file (ign) into buffer.
- ss Save all editing in final output file without exiting ED.
- ss Exit ED and save all editing in final output file.
- ss Erase all editing in buffer and final output file without exiting ED.
- ss Exit ED and erase all editing in buffer and final output file.

SUBMIT AND SUB COMMANDS

- SUBMIT Remove a b c ... Last SUBMIT command and "submit" comments stored in (ign) SUB to CP/M, and make optional text substitutions of \$1, \$2, \$3, etc. stored in (ign) with a, b c, etc., respectively.

XSUB (Related SUBMIT Program): This program is available only in CP/M 2.0/2.2, and is placed in a SUBMIT file to permit the submitting of entries in other programs loaded by SUBMIT. XSUB may not be entered by itself on the command line.

ASM COMMAND

- ASM Remove:22 Load the CP/M ASM Assembler and assemble filename ASM with optional parameters (ign) as follows: *y* = 1st parameter position where drive name stored with (ign) xoff can be specified. *z* = 2nd parameter position where drive name to which (ign) HEX is to be output can be specified. *u* = 3rd parameter position where drive name to which (ign) PBN is to be output can be specified. In either the 1st or 2nd positions you can specify "C" for no output, or in the 3rd position, "X" to send output to console device.

LOAD COMMAND

- LOAD Remove: Read (ign) (with extension .HEX (created with ASM command)), and create executable command file (ign) (with extension .COM).

SET COMMAND

- SET Load DDT (Dynamic Debugging Tool), and SET Manip: optionally place (ign) into memory.
- SET Subcommands: ("mem" (float hexadecimal (base 16) numbers, and "loc" means a free memory location.)

